

Please amend the paragraph in column 3, beginning at line 7 as follows:

a² A further advantage of the present invention is that [contaminate] contaminant laden EGR gasses will not backflow to the downstream side of the throttle valve, thus reducing the chance for unwanted sludge to build up and cause a throttle valve sticking condition.

Please amend the paragraph in column 5, beginning at line 45 as follows:

a³ When the air flows past the partially open throttle plate, a high velocity turbulent air flow is created by the pressure drop across the throttle plate 28. As the air flows between the vanes 62,64, the vanes 62,64 will diffuse and redirect the air flow [patter] pattern such that the air creates small vortices of turbulence around each vane, but with each adjacent vorticity rotating in the opposite direction, thus canceling each other out. This reduces the noise created, which reduces the noise radiated from the intake manifold 24. So, proper spacing depends upon getting effective canceling out of vortices as opposed to random spacing which may just cause turbulence in the air flow.

Please amend the paragraph in column 5, beginning at line 57 as follows:

a⁴ Generally the whoosh noise generated is the greatest at tip-in or fast opening of the throttle plate and also at part throttle cruising/tip-in conditions, which can be mistaken by a driver for a vacuum leak on the engine. Thus, with this new air flow pattern, the whoosh noise generated from the air flow will be attenuated, consequently reducing the overall noise passing through the [stake] intake manifold 24 and into the engine compartment. Again, the amount of noise attenuation improvement due to an increase in the size of the vanes must be balanced against the amount of flow loss (and hence horsepower loss) due to the vanes being in the air stream.

Please amend the paragraph in column 6, beginning at line 1 as follows:

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Another effect of the diffusing and redirecting of the air flow by the vanes 62,64 is that any backflow from the swirling air just downstream of the butterfly valve 28 will be reduced. Thus, some of the inlet air that might otherwise be drawn back against the downstream side of the butterfly valve 28 will continue flowing downstream into the manifold 24. For this manifold assembly, where it is desirable to locate the EGR inlet 68 close to the upstream end of the intake manifold 24, some of the EGR gasses can become entrained in the inlet air which is drawn back to the downstream side of the butterfly valve 28. Since the EGR gasses are likely to contain [contaminates] contaminants, these can settle on the butterfly valve 28 and downstream portion of the throttle body main bore 26 to form sludge. Consequently, the vanes 62,64, by diffusing and redirecting the inlet air, will significantly reduce the amount of backflow and hence the risk of [contaminates] contaminants from the EGR gasses causing build up of sludge on and a sticking condition of the butterfly valve 28.

Please amend the paragraph in column 7, beginning at line 35 as follows:

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FIG. 11 illustrates a seventh embodiment of the present invention. This air diffuser 720 is used in place of the air diffuser 20, illustrated in FIG. 1, for this embodiment. In this seventh embodiment, similar elements are similarly designated, but with 700 series numbers. The upper set of parallel vanes and the lower set of parallel vanes are really now just one [continues] continuous set of vertical vanes 762, along with the addition of parallel horizontal vanes 68. This forms a full grid pattern of vanes. The thickness of these vanes is constant along the length of the vanes. While the full grid pattern is most effective for diffusing and redirecting the air flow and thus for attenuation of the noise, there are very substantial flow losses created due to the significant amount of blockage of the main bore 752. This blockage will thus significantly reduce the maximum horsepower of the engine.